

1

Abstract of the Disclosure

1 A system and method indicate the direction faced by an operator.

2 A waterproof housing has a mounting mechanism to engage a part of a

3 headgear worn by an operator to position the housing in a portion of

4 the operator's forward field of view. A two-axis gimbal mechanism is

5 inside the waterproof housing and has a protective housing connected

6 to the waterproof housing. The protective housing contains ring

7 structure coupled to two orthogonal axis structures. A magnetic field

8 sensor module is mounted on one of the axis structures and provides

9 magnetic field data signals representative of the direction faced by

10 the operator. An optical element has a wide field of view to transmit

11 compass data images representative of the magnetic field data signals

12 to the eyes of the operator.

13